What is claimed:

1. Medical implant system with an implant made of a composite material in which glass fibers are embedded, a sensor element which is embedded in the implant and comprises at least one of the glass fibers being coupled to a measuring device which determines a physical property of the sensor element or its environment or changing of this property, wherein the glass fibers are embedded in the composite material as mechanical reinforcement in the form of a woven fabric, a knitted fabric or a fleece.

2. Implant system according to Claim 1, wherein the glass fibers are distributed in the composite material over the entire extent of the implant.

3. Implant system according to Claim 1, wherein the measuring device feeds electromagnetic radiation into the sensor element and determines physical properties of the sensor element or of its environment from the type of radiation that passes through and/or is reflected.

4. Implant system according to Claim 3, wherein the glass fiber of the sensor element is provided with a radiation-reflecting coating.

5. Implant system according to Claim 1, wherein the sensor element substantially consists of the glass fiber forming a sensor fiber.

6. Implant system according to Claim 5, wherein at least one region acting as a Bragg grating is incorporated in the sensor fiber.

7. Implant system according to Claim 5, wherein a substance that is induced to fluoresce by the fed-in electromagnetic radiation and the fluorescent properties of which undergo changes under the effect of the chemical environment outside the sensor fiber is embedded in the sensor fiber.

8. Implant system according to Claim 4, wherein the radiation-reflecting coating consists of a substance which changes the reflection behavior for the electromagnetic radiation in the sensor fiber under the effect of the chemical environment outside the sensor fiber.

9. Implant system according to Claim 1, wherein the sensor element comprises the glass fiber and a further sensor member, which is coupled to the measuring device via the glass fiber.

10. Implant system according to Claim 9, wherein the sensor member is a pressure sensor with a flexible membrane and a mirror element which can be moved by the latter and reflects the electromagnetic radiation fed into the glass fiber differently according to position.

11. Implant system according to Claim 9, wherein the sensor member is a Fabry-Pérot interferometer.

12. Implant system according to Claim 11, wherein in the Fabry-Pérot interferometer is formed as a thin-film interferometer that is brought into contact with the end of the glass fiber and the active film of which undergoes dimensional changes under the influence of the environment.

13. Implant system according to Claim 11, wherein the Fabry-Pérot interferometer comprises two glass

fibers with polished end faces, the spacing (B) between which can be changed by environmental influences.

14. Implant system according to Claim 1, wherein the glass fiber of the sensor element is connected directly to the measuring device.

15. Implant system according to Claim 14, wherein the measuring device is a microcontroller that is capable of being implanted in the body.

16. Implant system according to Claim 1, wherein the glass fiber is connected to a transducer, which exchanges signals with the measuring device without a physical connection.

17. Implant system according to Claim 16, wherein the transducer is capable of being implanted in the body.

18. Implant system according to Claim 16, wherein the transformer is a transducer.

19. Implant system according to Claim 16, wherein the transducer is a light source which has an associated light receiver.

20. Implant system according to Claim 19, wherein the light source emits electromagnetic radiation in the range between 650 and 1000 nm.

21. Implant system according to Claim 1, wherein the measuring device has an associated radiation transmitter, which transports radiation into the interior of the implant via a glass fiber in the implant.

22. Implant system according to Claim 21, wherein the transport of the radiation takes place via the glass fiber of a sensor element.

23. Implant system according to Claim 21, wherein the transport of the radiation takes place via a glass fiber which is embedded in the implant in addition to the glass fiber of a sensor element.

24. Implant system according to Claim 21, wherein the wavelength and intensity of the transported radiation are chosen such that the radiation induces mechanical and/or material changes in the composite material of the implant.

25. Implant system according to Claim 21, wherein the measuring device and the radiation transmitter have an associated controller, which activates the radiation transmitter in dependence on the measured variables of the measuring device.